ABSTRACT

The invention relates to methods and compositions for causing the selective targeting and killing of tumor cells. Through ex vivo gene therapy protocols tumor cells are engineered to express an α (1,3) galactosyl epitope. The cells are then irradiated or otherwise killed and administered to a patient. The α galactosyl epitope causes opsonization of the tumor cell enhancing uptake of the opsonized tumor cell by antigen presenting cells which results in enhanced tumor specific antigen presentation. The animal's immune system thus is stimulated to produce tumor specific cytotoxic cells and antibodies which will attack and kill tumor cells present in the animal.